

Classification

Antiemetic

Prehospital Indications

Multiple provider impressions: Nausea and/or vomiting, or prior to fentanyl or morphine administration to reduce potential for nausea/ vomiting

Other Common Indications

None

Adult Dose

4 mg ODT/IV/IM, may repeat x1 in 15 min prn

Pediatric Dose

4 mg ODT, only for 4 years of age or older

Mechanism of Action

Mechanism of action has not been fully characterized but believed to function via serotonin antagonism at central and/or peripheral receptors. Serotonin receptors of the 5-HT₃ type are present both peripherally on vagal nerve terminals and centrally in the chemoreceptor trigger zone of the area of the medullary structure that controls vomiting.

Pharmacokinetics

Onset is 1-5 min; duration is 4-6 hr

Contraindications

Known allergy to Ondansetron
Pregnancy, regardless of gestational age

Interactions

Amiodarone and other QT prolonging drugs (additive prolongation of QT may produce torsade de pointes/polymorphic ventricular tachycardia)

Adverse Effects

Constipation
Headache
QT prolongation
Sedation

Prehospital Considerations

- May cause prolonged QT interval. Caution in patients with known prolonged QT syndrome or recent/simultaneous use of other QT-prolonging drugs.
- Should not be administered in patients known to be pregnant, regardless of gestational age.
- Peak activity is decreased by approximately 40% in oral administration, compared to IV, due to first pass metabolism in the liver.